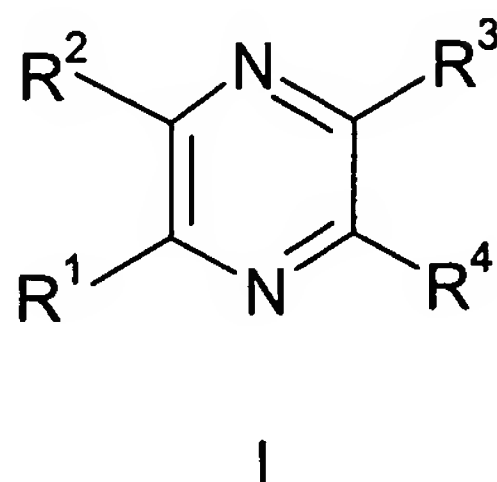


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims

1. (currently amended) A compound of formula (I):



~~and~~ or a pharmaceutically acceptable salt ~~salts~~ thereof, in which

R¹ and R² independently represent phenyl, thienyl or pyridyl each of which is independently optionally substituted by one or more groups represented by Z;

Z represents a C₁₋₈alkyl group, a C₁₋₆alkoxy group, hydroxy, halo, trifluoromethyl, trifluoromethylthio, trifluoromethoxy, trifluoromethylsulphonyl, nitro, mono or di C₁₋₃alkylamido, C₁₋₃alkylthio, C₁₋₃alkylsulphonyl, C₁₋₃alkylsulphonyloxy, C₁₋₃alkoxycarbonyl, carboxy, cyano, carbamoyl, mono or di C₁₋₃alkyl carbamoyl, sulphamoyl, acetyl, an aromatic heterocyclic group which is optionally substituted by one or more halo, C₁₋₄alkyl, trifluoromethyl or trifluoromethoxy, or Z represents ~~and~~ a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one or more heteroatoms selected from nitrogen, oxygen or sulphur wherein the heterocyclic group is optionally substituted by one or more C₁₋₃alkyl ~~groups~~, hydroxy, fluoro, benzyl or an amino group -NR^xR^y in which R^x and R^y independently represent H or C₁₋₄alkyl; R³ and R⁴ independently represent a group of formula (CH₂)_nCOOR⁷ in which n is 0, 1, 2, 3 or 4; and R⁷ represents a C₄₋₁₂alkyl group, a C₃₋₁₂cycloalkyl group or a (C₃₋₁₂cycloalkyl)C₁₋₃alkyl- group each of which is optionally substituted by one or more of the following: a C₁₋₆alkyl, ~~group~~; fluoro, amino or hydroxyl group, or R⁷ represents a group -(CH₂)_aphenyl in which a is 0, 1, 2, 3 or 4 and the phenyl group is optionally

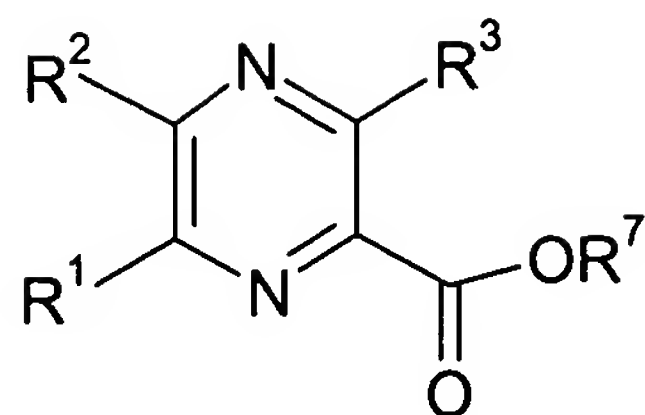
- substituted by one or more groups represented by Z which may be the same or different or R⁷ represents a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one or more of the ~~of the~~ following: oxygen, sulphur or nitrogen; wherein the heterocyclic group is optionally substituted by one or more C₁₋₃alkyl ~~groups~~, C₁₋₃acyl ~~groups~~, hydroxy, amino or benzyl groups; or
- R³ and R⁴ independently represent a group of formula -(CH₂)_o-O-(CH₂)_p-R⁸ in which o and p independently represent an integer 0, 1, 2, 3 or 4, with the proviso that neither R³ or R⁴ is methoxy, and R⁸ represents a C₁₋₁₂alkyl group or R⁸ represents phenyl optionally independently substituted by one or more Z groups or R⁸ represents an aromatic heterocyclic group or a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one or more of ~~one~~ the following: oxygen, sulphur or nitrogen wherein each of these rings is optionally substituted by one or more groups represented by Z which may be the same or different; or
- R³ and R⁴ independently represent a C₁₋₁₂alkyl group optionally substituted by one or more fluoro, hydroxy, or amino groups, provided that if R³ is C₁₋₄alkyl then R⁴ cannot be C₁₋₄alkyl or q cannot be 0 in R⁴, or
- R³ and R⁴ independently represent a group of formula -(CH₂)_qR⁹ in which q is 0, 1, 2, 3 or 4, provided that if q is 0 in R³ then q cannot be 0 in R⁴, and if q is 0 in R⁴ then q cannot be 0 in R³ and vice versa, R⁹ represents a C₃₋₁₂cycloalkyl group, phenyl, an aromatic heterocyclic group or a saturated or partially unsaturated 5- to 12membered heterocyclic group containing one or more of ~~one~~ the following: oxygen, sulphur or nitrogen, wherein each of these rings is optionally substituted by one or more groups represented by Z which may be the same or different or each of these rings is substituted by phenyl which is optionally substituted by one or more C₁₋₄alkyl, [[a]] C₁₋₄alkoxy, hydroxy, halo or trifluoromethyl[.]; or
- R³ and R⁴ independently represent a group of formula -(CH₂)_m-O-(CO)-R¹⁰ in which m represents an integer 0, 1, 2, 3 or 4, in which R¹⁰ represents a C₁₋₁₂alkyl group optionally substituted by one or more fluoro, hydroxy, or amino groups or R¹⁰ represents a group of formula -(CH₂)_qR⁹ ~~in which q and R⁹ is as previously described~~; or
- R³ and R⁴ are identical and represent a group of formula CONR¹¹R¹² in which R¹¹ and R¹² independently represent a C₁₋₆alkyl group; an (amino)C₁₋₄alkyl- group in which the

amino is optionally substituted by one or more C₁₋₃alkyl groups; a (C₃₋₁₂cycloalkyl)(CH₂)_g- group wherein g is 0, 1, 2 or 3, wherein the cycloalkyl is optionally substituted by one or more fluoro, hydroxy, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkoxycarbonyl, trifluoromethyl, amino or trifluoromethoxy groups; a group -(CH₂)_r(phenyl)_s in which r is 0, 1, 2, 3 or 4, s is 1 when r is 0 otherwise s is 1 or 2 and the phenyl groups are optionally independently substituted one or more groups represented by Z; naphthyl; anthracenyl; a saturated or partially unsaturated 5- to 8-membered heterocyclic group containing one or more heteroatoms selected from nitrogen, oxygen or sulphur wherein the heterocyclic group is optionally substituted by one or more C₁₋₃alkyl groups, hydroxy, fluoro, trifluoromethyl, benzyl or an amino group -NR^xR^y in which R^x and R^y independently represent H or C₁₋₄alkyl; 1-adamantylmethyl; a group -(CH₂)_tHet in which t is 0, 1, 2, 3 or 4, and the alkylene chain is optionally substituted by one or more C₁₋₃alkyl groups and Het represents an aromatic heterocyclic group optionally substituted by one, two or three groups selected from a C₁₋₅alkyl group, a C₁₋₅alkoxy group or halo; or R¹¹ represents H and R¹² is as defined above; or R¹¹ and R¹² together with the nitrogen atom to which they are attached represent a saturated or partially unsaturated 5- to 8-membered heterocyclic group containing one nitrogen and optionally one of the following: oxygen, sulphur or an additional nitrogen; wherein the heterocyclic group is optionally substituted by one or more C₁₋₃alkyl groups, hydroxy, fluoro, trifluoromethyl, trifluoromethoxy, benzyl, C₁₋₆alkanoyl or an amino group -NR^xR^y in which R^x and R^y independently represent H or C₁₋₄alkyl;

with the provisos that

- 1) when R³ and R⁴ are both a group of formula CONR¹¹R¹² then they do not represent carbamoyl, or mono or di C₁₋₃alkylcarbamoyl, and
 - 2) when R¹, R² and R³ each represent phenyl then R⁴ is not benzyl[[.]], and
 - 3) when one of R³ or R⁴ is C₁₋₄alkyl then the other is not a group -(CH₂)_qR⁹ in which q is 0.
2. (original) A compound according to claim 1, wherein R¹ and R² are phenyl optionally substituted by one or more groups Z.

3. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R^1 and R^2 are both 4-chlorophenyl.
4. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R^3 and R^4 independently represent a group of formula COOR^7 in which R^7 is a C_{4-8} alkyl group.
5. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R^3 represents a group of formula COOR^7 in which R^7 is a C_{4-8} alkyl group and R^4 represents a group of formula $-(\text{CH}_2)_o-\text{O}-(\text{CH}_2)_p-\text{R}^8$ in which o and p independently represent an integer 0, 1, 2, 3 or 4, and R^8 represents phenyl optionally independently substituted by one or more Z groups.
6. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R^3 and R^4 both represent a group of formula $\text{CON R}^{11} \text{ R}^{12}$ in which R^{11} and R^{12} together with the nitrogen atom to which they are attached represent piperidino.
7. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R^3 represents a group of formula COOR^7 in which R^7 is a C_{4-8} alkyl group and R^4 represents a group of formula R^3 and R^4 independently represent a group of formula $-(\text{CH}_2)_m-\text{O}-(\text{CO})-\text{R}^{10}$ in which m represents an integer 0, 1, 2, 3 or 4, in which R^{10} represents a C_{1-12} alkyl group optionally substituted by one or more fluoro, hydroxy, or amino groups or R^{10} represents phenyl optionally substituted by one or more groups represented by Z which may be the same or different.
8. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R^3 and R^4 are identical.
9. (currently amended) A compound ~~of formula I~~ according to claim 1 as represented by formula II:



II

in which R¹ and R² are both 4-chlorophenyl;

R³ represents dihydrooxazolyl, (3-oxa-1-azaspiro[4.4]nonenyl), oxazolyl or tetrazol-2-ylmethyl optionally substituted by phenyl or a C₁₋₄alkyl group; and

R⁷ represents a C₄₋₁₂alkyl group, a C₃₋₁₂cycloalkyl group or a (C₃₋₁₂cycloalkyl)C₁₋₃alkyl- group each of which is optionally substituted by one or more of the following: a C₁₋₆alkyl, group; fluoro, amino or hydroxyl group.

10. (original) A compound selected from ~~one or more of the following~~:

2,3-bis(4-chlorophenyl)-5,6-bis(piperidin-1-ylcarbonyl)pyrazine,

bis-2,3-(*tert*-butoxy)-5,6-bis(4-chlorophenyl)pyrazine-2,3-dicarboxylate,

5,6-bis(4-chlorophenyl)-3-(4,4-dimethyl-4,5-dihydrooxazol-2-yl)-pyrazine-2-carboxylic acid *tert*-butylester,

5,6-bis(4-chlorophenyl)-3-(3-oxa-1-azaspiro[4.4]non-1-en-2-yl)-pyrazine-2-carboxylic acid *tert*-butylester,

5,6-bis(4-chlorophenyl)-3-(4-methyl-4,5-dihydrooxazol-2-yl)-pyrazine-2-carboxylic acid *tert*-butylester,

5,6-bis(4-chlorophenyl)-3-(4-methyloxazol-2-yl)-pyrazine-2-carboxylic acid *tert*-butylester,

5,6-bis(4-chlorophenyl)-3-(4-phenyloxazol-2-yl)-pyrazine-2-carboxylic acid *tert*-butylester,

5,6-bis(4-chlorophenyl)-3-(5-phenyl-4,5-dihydrooxazol-2-yl)-pyrazine-2-carboxylic acid *tert*-butylester, or

tert-butyl 5,6-bis(4-chlorophenyl)-3-(2*H*-tetrazol-2-ylmethyl)pyrazine-2-carboxylate, ~~and~~ or a pharmaceutically acceptable salt salts thereof.

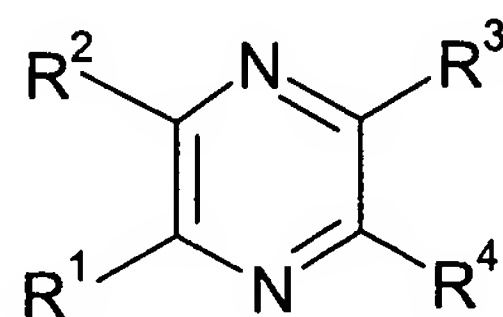
11. (cancelled)

12. (currently amended) A pharmaceutical formulation comprising a compound of claim 1 ~~formula I according to any one of claims 1-10, as defined in any either claim 1 or claim 2~~ and a pharmaceutically acceptable adjuvant, diluent or carrier.

13-14. (cancelled)

15. (currently amended) A method of treating obesity, psychiatric disorders, psychotic disorders, schizophrenia and bipolar disorders, anxiety, anxio-depressive disorders, depression, cognitive disorders, memory disorders, obsessive-compulsive disorders, anorexia, bulimia, attention disorders, epilepsy, and related conditions, neurological disorders, neurological disorders, Parkinson's Disease, Huntington's Chorea and Alzheimer's Disease, immune, cardiovascular, reproductive and endocrine disorders, septic shock, diseases related to the respiratory and gastrointestinal system, and extended abuse, addiction and/or relapse indications, comprising administering a pharmacologically effective amount of a compound ~~of formula I~~ according to any one of the claims 1 or 9-10 or a formulation of claim 12 to a patient in need thereof.

16. (currently amended) A method of treating obesity, psychiatric disorders, psychotic disorders, schizophrenia and bipolar disorders, anxiety, anxio-depressive disorders, depression, cognitive disorders, memory disorders, obsessive-compulsive disorders, anorexia, bulimia, attention disorders, epilepsy, and related conditions, neurological disorders, neurological disorders, Parkinson's Disease, Huntington's Chorea and Alzheimer's Disease, immune, cardiovascular, reproductive and endocrine disorders, septic shock, diseases related to the respiratory and gastrointestinal system, and extended abuse, addiction and/or relapse indications, comprising administering a pharmacologically effective amount of a compound of formula Ia, or a pharmaceutically acceptable salt thereof, to a patient in need thereof, wherein Formula Ia has the ~~following general~~ formula:



Ia

in which R^1 and R^2 independently represent phenyl, thienyl or pyridyl each of which is independently optionally substituted by one or more groups represented by Z;

Z represents a C_{1-8} alkyl group, a C_{1-6} alkoxy group, hydroxy, halo, trifluoromethyl, trifluoromethylthio, trifluoromethoxy, trifluoromethylsulphonyl, nitro, mono or di C_{1-3} alkylamido, C_{1-3} alkylsulphonyl, C_{1-3} alkylsulphonyloxy, C_{1-3} alkoxycarbonyl, carboxy, cyano, carbamoyl, mono or di C_{1-3} alkyl carbamoyl, sulphamoyl, acetyl, an aromatic heterocyclic group which is optionally substituted by one or more halo, C_{1-4} alkyl, trifluoromethyl or trifluoromethoxy, or Z represents ~~and~~ a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one or more heteroatoms selected from nitrogen, oxygen or sulphur wherein the heterocyclic group is optionally substituted by one or more C_{1-3} alkyl ~~groups~~, hydroxy, fluoro, benzyl or an amino group - NR^xR^y in which R^x and R^y independently represent H or C_{1-4} alkyl;

R^3 and R^4 independently represent a group of formula $(CH_2)_nCOOR^7$ in which n is 0, 1, 2, 3 or 4; and R^7 represents a C_{1-12} alkyl group, a C_{3-12} cycloalkyl group or a $(C_{3-12}$ cycloalkyl) C_{1-3} alkyl- group each of which is optionally substituted by one or more of the following: a C_{1-6} alkyl, ~~group~~; fluoro, amino or hydroxyl group, or R^7 represents a group $-(CH_2)_a$ phenyl in which a is 0, 1, 2, 3 or 4, and the phenyl group is optionally substituted by one or more groups represented by Z which may be the same or different or R^7 represents a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one or more of ~~of the~~ the following: oxygen, sulphur or nitrogen; wherein the heterocyclic group is optionally substituted by one or more C_{1-3} alkyl ~~groups~~, C_{1-3} acyl ~~groups~~, hydroxy, amino or benzyl groups; or

R^3 and R^4 independently represent a group of formula $-(CH_2)_o-O-(CH_2)_p-R^8$ in which o and p independently represent an integer 0, 1, 2, 3 or 4, and R^8 represents a C_{1-12} alkyl group or R^8 represents phenyl optionally independently substituted by one or more Z groups or R^8 represents an aromatic heterocyclic group or a saturated or partially unsaturated 5- to 8-membered heterocyclic group containing one or more of ~~one~~ the following: oxygen, sulphur or nitrogen wherein each of these rings is optionally substituted by one or more groups represented by Z which may be the same or different; or

R^3 and R^4 independently represent a C_{1-12} alkyl group optionally substituted by one or more fluoro, hydroxy, or amino groups; or

R^3 and R^4 independently represent a group of formula $-(CH_2)_qR^9$ in which q is 0, 1, 2, 3 or 4, and R^9 represents a C_{3-12} cycloalkyl group, phenyl, an aromatic heterocyclic group or a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one or more of one following: oxygen, sulphur or nitrogen wherein each of these rings is optionally substituted by one or more groups represented by Z which may be the same or different; or

R^3 and R^4 independently represent a group of formula $-(CH_2)_m-O-(CO)-R^{10}$ in which m represents an integer 0, 1, 2, 3 or 4, in which R^{10} represents a C_{1-12} alkyl group optionally substituted by one or more fluoro, hydroxy, or amino groups or R^{10} represents a group of formula $-(CH_2)_qR^9$ ~~in which q and R^9 is as previously described~~; or

R^3 and R^4 independently represent a group of formula $CONR^{11}R^{12}$ in which R^{11} and R^{12} independently represent a C_{1-6} alkyl group; an (amino) C_{1-4} alkyl- group in which the amino is optionally substituted by one or more C_{1-3} alkyl groups; a $(C_{3-12}$ cycloalkyl) $(CH_2)_g$ - group wherein g is 0, 1, 2 or 3, wherein the cycloalkyl is optionally substituted by one or more fluoro, hydroxy, C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkoxycarbonyl, trifluoromethyl, amino or trifluoromethoxy groups; a group $-(CH_2)_r(phenyl)_s$ in which r is 0, 1, 2, 3 or 4, s is 1 when r is 0, otherwise s is 1 or 2 and the phenyl groups are optionally independently substituted one or more groups represented by Z ; naphthyl; anthracenyl; a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one or more heteroatoms selected from nitrogen, oxygen or sulphur wherein the heterocyclic group is optionally substituted by one or more C_{1-3} alkyl groups, hydroxy, fluoro, trifluoromethyl, benzyl or an amino group $-NR^xR^y$ in which R^x and R^y independently represent H or C_{1-4} alkyl; 1-adamantylmethyl; a group $-(CH_2)_tHet$ in which t is 0, 1, 2, 3 or 4, and the alkylene chain is optionally substituted by one or more C_{1-3} alkyl groups and Het represents an aromatic heterocyclic group optionally substituted by one, two or three groups selected from a C_{1-5} alkyl group, a C_{1-5} alkoxy group or halo; or R^{11} represents H and R^{12} is as defined above; or R^{11} and R^{12} together with the nitrogen atom to which they are attached represent a saturated or partially unsaturated 5- to 8membered heterocyclic group containing one nitrogen and optionally one of the following: oxygen, sulphur or an additional nitrogen; wherein the heterocyclic group is optionally substituted by one or more C_{1-3} alkyl groups, hydroxy, fluoro, trifluoromethyl, trifluoromethoxy,

benzyl, C₁₋₆alkanoyl or an amino group -NR^xR^y in which R^x and R^y independently represent H or C₁₋₄alkyl;

with the proviso that when one of R³ and R⁴ is a C₁₋₃alkyl group, a C₁₋₃alkoxymethyl group, trifluoromethyl, a hydroxyC₁₋₃alkyl group, C₁₋₃alkoxycarbonyl, carboxy, carbamoyl, or mono or di C₁₋₃alkylcarbamoyl then the other does not represent a group of formula CONR¹¹R¹².

17. (currently amended) A method compound according to any of the claims 1-10 for use in the treatment of obesity comprising administering a pharmacologically effective amount of a compound of any one of claims 1 or 9-10 or a formulation of claim 12 to a patient in need thereof.